Translation

PCT/JP2003/016538

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 301047980	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2003/016538	International filing date (*day/month/year*) 24 December 2003 (24.12.2003)	Priority date (*day/month/year*) 24 December 2002 (24.12.2002)
International Patent Classification (IPC) or national classification and IPC H04L 12/56		
Applicant FUKUSHIMA, Hajime		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

   a. ☒ *(sent to the applicant and to the International Bureau)* a total of 19 sheets, as follows:

      ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

   ☒ Box No. I Basis of the report
   ☐ Box No. II Priority
   ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   ☐ Box No. IV Lack of unity of invention
   ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   ☐ Box No. VI Certain documents cited
   ☒ Box No. VII Certain defects in the international application
   ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
14 July 2004 (14.07.2004)	20 January 2005 (20.01.2005)
Name and mailing address of the IPEA/JP Facsimile No.	Authorized officer Telephone No.

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ational application No.
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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:

☐ international search (under Rules 12.3 and 23.1(b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ The international application as originally filed/furnished

☒ the description:

pages 2,4-16,18-35,37-58,60-74,76,77,79-83,85, as originally filed/furnished

pages* 1,3,3/1,17,36,59,75,78,84 received by this Authority on 27 December 2004 (27.12.2004)

pages* _____ received by this Authority on _____

☒ the claims:

pages _____, as originally filed/furnished

pages* _____, as amended (together with any statement) under Article 19

pages* 1-52 received by this Authority on 27 December 2004 (27.12.2004)

pages* _____ received by this Authority on _____

☒ the drawings:

pages 1-28, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to sequence listing *(specify)*: _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, Nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing *(specify)*: _____

☐ any table(s) related to sequence listing *(specify)*: _____

* *If item 4 applies, some or all of those sheets may be marked "superseded."*

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Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1-52	YES
	Claims		NO
Inventive step (IS)	Claims	1-5, 8-52	YES
	Claims	6, 7	NO
Industrial applicability (IA)	Claims	1-52	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1: JP, 2002-135301, A (Nippon Telegraph and Telephone Corporation), May 10, 2002 (05.10.02)
Paragraphs 0019-0031, Figs. 1 and 2

Document 2: Toshiaki TAGO, "Ima kara demo Maniau UNIX & Linux Nyumon Dai 5 Kai Network no Settei (Sono 2)," DB Magazine, (K.K. Soeisha), Vol. 11, No. 11, January 1, 2002 (01.01.02), pp. 168-174, Column of "nslookup" (p. 170)

Document 3: JP, 2002-318737, A (K.K. Index), October 31, 2002 (10.31.02)
Paragraphs 0037 to 0052, All drawings

Document 4: JP, 11-122283, A (Toshiba Corporation)
April 30, 1999 (04.30.99)
Paragraphs 0029 to 0053, Figs. 1-9

Claims 6 and 7

Document 1 describes that a management server transmits a random value r ("response request" in claim 6 etc. of the present application) to a server to be managed, and the server to be managed that has received the random value r calculates a function value y' from the random value r and sends back the function value y' (corresponding to "response" in claim 6 etc. of the present application) to the management server (see document 1, paragraphs 0019 to 0031).

A management server transmitting a random value r to a server to be managed and the server to be managed sending back a function value y' correspond to a destination communication node responding to a response request from a transmitter communication node in the invention relating to claim 6 of the present application.

A network comprising a transmitter node, destination communication node and mapping announcement system, wherein a host name (static identifier) and dynamic address (IP address) are correlated, thereby acquiring host reachability, is well known as a network using a dynamic DNS; therefore, applying the invention described in document 1 to the well-known network to achieve the configuration of claims 6 and 7 of the present application could be easily conceived of by a party skilled in the art.

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

1. Claim 43 describes a "medium characterized in storing a program product according to any one of claims 41 through 42"; however, the invention of claim 41 is not an invention of a program product.

2. Claim 52 cites claim 54 but there is no claim 54.

Claim 52 is found to be a "computer readable medium characterized in storing a program product according to claim 51" by the present international preliminary examination report.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of Box V.2:

Claims 1-5

None of documents 1-4 describes or suggests that a mapping combining a static identifier and dynamic address of a mapping announcement system and a mapping combining a static identifier and dynamic address of a destination communication node are compared to judge veracity of reachability with respect to a destination communication node.

Claims 8-27

None of documents 1-4 describes or suggests that information by which reachability with respect to a destination communication node is confirmed by a transmitter communication node is stored in a mapping announcement system, a prescribed communication is made between the transmitter communication node and the destination communication node, and the transmitter communication node, having made reply to the destination mode, makes comparison with any information it has stored itself, thereby confirming veracity of reachability.

Claims 28-35

None of documents 1-4 describes or suggests that veracity of reachability with respect to a destination communication node is judged by static information sent in reply from a destination communication node.

Claims 36-43

None of documents 1-4 describes or suggests a configuration such that when nonexistence of a destination node is detected, a mapping combining a static identifier and dynamic address indicating a destination communication node in the mapping announcement system is not announced.

Claims 44-52

None of documents 1-4 describes or suggests that given information that a transmitter node uses for making inquiry of the destination node to a mapping announcement system is stored as a response to be made by a communication node, and reply of such information is given as a reply to a sign or communication in a method agreed to in advance.